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| 10/710,580 | 07/22/2004 | CHIEH-SHENG HSU | WNCP0011USA | 4579 |
| 27765 | 7590 | 08/02/2005 | EXAMINER | |
| NORTH AMERICA INTERNATIONAL PATENT OFFICE (NAIPC) | | | VY, HUNG T | |
| P.O. BOX 506 | | | ART UNIT | |
| MERRIFIELD, VA 22116 | | | PAPER NUMBER | |
| | | | 2821 | |

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

1. As of entry of the request for continued examination filed on dated 03/17/2005, claims 1-3, 5, 7-13, 15, and 17-20 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 9, 11 are rejected under 35 U. S. C. § 102 (b) as being anticipated by Sletten et al., U.S. patent No. 6,271,792.

Regarding claims 1, 9 Sletten et al. disclose a patch antenna and a method of antenna assembly, comprising: a dielectric layer face 205 having a top surface and a bottom surface, a first priming layer on the top surface, a second priming layer on the bottom surface, a first adhesive layer 202 on the first priming layer, a second adhesive layer 203 on the second priming layer, a radiating element 201 on the first adhesive layer 202, and a ground plate 204 on the second adhesive layer 203 (See fig. 2).

Regarding claims 3 and 13, the dielectric layer comprises a material selected from a group consisting of Teflon (see column 1, line 22).

Regarding claims 11, sletten et al. disclose the first adhesive layer is double sided type (See fig. 2).

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 10 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Sletten et al., U.S. patent No. 6,271,792 in view of O'Neill, Jr., U.S. Patent No. 5,969,681.

Regarding claims 2 and 10, Sletten et al. disclose all limitation of the patch antenna but Sletten et al. do not disclose a low noise amplifier integrated with the patch antenna by sharing a common ground plate or by electrically connecting respective ground plates and a signal connector pin from the amplifier to the radiating element. However, O'Neill, Jr. discloses the LNA (See column 12, line 64-68). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Sletten et al. to have LNA as taught by O'Neill, Jr. The motivation for doing so would have been to provide LNA in order to reduce thickness and stray inductances (See column 12, line 66-67).

5. Claims 4-8, 12, 14-17 and 19-20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Sletten et al., U.S. patent No. 6,271,792 in view of Tillery et al., U.S. Pub. No. 2004/0150561.

Regarding claims 4-8, 12, 14-17, and 19-20, Sletten et al. disclose all limitations of invention except for the dielectric layer substantially is polymer plastic. However,

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Tillery et al. disclose the dielectric layer substantially is polymer plastic (See paragraph 0007). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Sletten et al. to have different material as taught by Tillery et al. The motivation for doing so would have been to provide different material of dielectric in order to reduce cost. Further more, the dielectric has different material since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

6. Claim 18 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Sletten et al., U.S. patent No. 6,271,792 in view of Tillery et al., U.S. Pub. No. 2004/0150561 and further in view of view of O'Neill, Jr., U.S. Patent No. 5,969,681.

Regarding claim 18, Sletten et al. and Tillery et al. disclose all limitation of the patch antenna but sletten et al. do not disclose a low noise amplifier integrated with the patch antenna by sharing a common ground plate or by electrically connecting respective ground plates and a signal connector pin from the amplifier to the radiating element. However, O'Neill, Jr. discloses the LNA (See column 12, line 64-68). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Sletten et al. and Tillery et al. to have LNA as taught by O'Neill, Jr. The motivation for doing so would have been to provide LNA in order to reduce thickness and stray inductances (See column 12, line 66-67).

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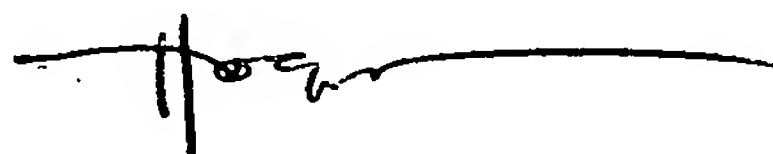
Conclusion

7. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (571) 272-1954. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (703) 308-7722 for After Final communications.

Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either private Pair or Public Pair. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hung T. Vy
Art Unit 2821
July 25, 2005.



HOANG V. NGUYEN
PRIMARY EXAMINER

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